THE

BOSTON MEDICAL AND SURGICAL JOURNAL.

NEW SERIES.] THURSDAY, AUGUST 19, 1869. [VOL. IV.—No. 3.

Original Communications.

IS THE SAFETY-VALVE FUNCTION OF THE RIGHT VENTRICLE SOMETIMES THE CAUSE OF A TRANSIENT SYSTOLIC MURMUR?

By F. I. KNIGHT, M.D., Boston.

As long ago as 1837, Mr. T. King, in *Guy's Hospital Reports*, vol. ii., p. 104, called attention to the fact that, if in a heart we expose the mitral and tricuspid valves by cutting away the auricles, and then, having removed the semilunar valves, inject fluid simultaneously with considerable force into the ventricles, through the aorta and pulmonary artery, the mitral valve will effectually prevent the passage of any of the fluid, while a certain amount will pass through the tricuspid.

Prof. Austin Flint, Jr., referring to this fact, says:—"The advantage of this slight insufficiency is apparent on a little reflection. The right ventricle sends its blood to the lungs, where, in order to facilitate the respiratory processes, the walls of the capillaries are very thin. The lungs themselves are exceedingly delicate, and an effusion of blood, or considerable congestion, would be liable to be followed by serious consequences. To prevent this, the right ventricle is not permitted to exert all its force, under all circumstances, upon the blood going into the pulmonary artery; but when the action of the heart is exaggerated from any cause the lungs are relieved by a slight regurgitation, which takes place through the tricuspid valve."

This physiological fact has thus long been recognized, and was even before *suggested* by John Hunter and Mr. Adams; but it has never, as far as I know, been thought to be of any clinical importance.

But it seems to me that this normal regurgitant current may sometimes be the cause of the murmur in those cases in which after death we fail to find the expected cardiac lesion. A loud, transient systolic murmur, evidently produced in the heart, and not in the large vessels leading from the heart, is not unfrequently heard in cases of acute rheumatism, in fevers, in inflammatory diseases generally, and after violent exercise in health, when the circulation is much accelerated, and this when no organic lesion can be found after death.

It is unnecessary to bring forward any proof of this statement, for cases of the kind have occurred in the practice of every physician.

The most notable cases in this connection are those where the murmur exists during some embarrassment of the pulmonary circulation, but disappears when the circulation is relieved, and appears again and again as the pulmonary circulation is seriously interfered with. For instance, in a case of ascites this murmur has been known to disappear after paracentesis, and appear again with the accumulation of fluid.* And again, in a case of chronic bronchitis, with dyspnœa, which is so much increased by lying down, the patient presented a murmur over the heart while lying, but none while sitting up.

The left ventricle has always been considered the seat of the murmur, and it has been accounted for in two ways:—

1. By deficient or irregular contraction of the papillary muscles, as in chorea.

2. Walsh says, by "disordered innervation of the auriculo-ventricular valves;" they are provided with sympathetic filaments, why may they not palpitate as well as the aorta?"

It is probable that both of these conditions do sometimes obtain, but they are not sufficient, in my opinion, to cover all cases, and we have very little reason for supposing that "an altered condition of the blood" will account for the murmur.

If the question is asked why it is necessary to refer this murmur to the left side of the heart, the reply will be made that it is heard loudest near the apex, and therefore must belong to the left side of the heart. Now I think that the point of greatest intensity will often be found over the body of the heart. Physicians are so ac-

* Elliotson, quoted by Hope (1st ed., p. 375).

customed to refer a systolic murmur evidently below the aorta to the mitral valve, that it becomes a matter of routine to say "loudest at apex." But I am not sure even that a tricuspid murmur may not sometimes be heard loudest very near the apex of the heart.

We have been accustomed to examine just above the ensiform cartilage for tricuspid murmurs, and do sometimes find them of greatest intensity there; but I do not think it settled that this is the seat of their greatest intensity, even in a majority of cases.

Again, it has not unfrequently happened that when there has been organic disease of this valve, associated with lesion in the left side of the heart, no murmur has been recognized as tricuspid, because none was heard with greatest intensity near the ensiform cartilage, when not improbably there may have been a murmur, originating at this orifice, so mingled with the mitral at the apex as not to be distinguished from it.

So often has this murmur *seemed* to be wanting, that some writers have said that organic changes at the tricuspid orifice do not necessarily give rise to murmurs. But I do not consider it by any means settled where we *may* or where we may not hear a tricuspid regurgitant murmur. The murmur in question is sometimes heard over the body of the heart, and, as far as position goes, I think may originate at either auriculo-ventricular orifice.

What other objections besides that of the place of its greatest intensity might be raised to its being due to tricuspid regurgitation? It might be asked, "would the regurgitant stream, even allowing it to exist, give rise to a murmur unless there was some affection of the valve?" I see no reason why the valve should not vibrate as this regurgitant current passes over it; and we know that in dilatation of the left ventricle following aortic disease we not unfrequently get a murmur from mitral regurgitation, where after death we find no disease of the mitral valve. Again, it may be asked, "would there not be pulsation of the jugular veins if there was tricuspid regurgitation?" Yes, if there is very free tricuspid regurgitation we do get pulsation of the jugulars, but it is not necessary to suppose that the slight amount of regurgitation essential for the protection of the lungs would cause it.

Note.—The preceding remarks were made by me at the meeting of the Suffolk District Med. Society in September, 1868.

In an interesting article "On Functional Valvular Disorders of the Heart," in the *American Journal of the Medical Sciences* for July, 1869, Dr. DaCosta, in discussing the murmur which was the subject of my remarks, says:—"We find that it is most likely to be generated at the auriculo-ventricular orifice on the left side." "The proof of (this) is afforded by its site, which clinically corresponds more closely to the mitral orifice than to any other part; and this seems to me, too, to be a strong point against supposing the blowing sound to be due to tricuspid regurgitation."

It does not seem to me that the site of the murmur furnishes conclusive proof that it is generated at the auriculo-ventricular orifice on the left side. Dr. DaCosta says: "The more carefully I have kept my notes the more distinctly I find it stated that it is not an apex murmur, strictly speaking, but rather occurs above the apex, more over the body of the left ventricle." Of course it must be over the body of the right ventricle also, which lies directly in front of the left. This is considered by Dr. Gairdner and others as the region of tricuspid murmurs, i. e. the right ventricle where it is least covered by lung. Dr. Flint says:—"In two instances of tricuspid lesions not associated with lesions affecting the left side of the heart, which have come under my observation, a soft and feeble systolic murmur was limited to the superficial cardiac region."* By the *superficial* cardiac region he designates that region where the heart is uncovered by lung.

WATERMELON *vs.* DIARRHŒA.

By S. G. Webber, M.D., Boston.

At this season of the year an opportunity may be afforded of testing the value of certain fruits as remedial agents. It is a popular notion that blackberry jam is a valuable means of combating slight attacks of bowel complaint. Whortleberries, the low bush, sweet variety, are considered by some to possess similar properties, or at least not to be contra-indicated. On the other hand, a doctor friend thinks he has seen dysentery caused by the irritation produced by the seeds.

I do not, however, find that people generally look upon watermelon as a desirable article of food when the bowels are loose. Several cases have come to my notice where that fruit seemed to be of benefit. Any one who has indulged in it may have

* On Diseases of the Heart, p. 214.

observed its powerful diuretic properties, which are not dependent upon the amount of water ingested, for the same amount of clear water does not cause so copious an evacuation of urine.

This diuretic property of the fruit is an indication in favor of its use. The fruit is also notoriously cooling and refreshing. May it not derive this quality, and also its diuretic power, from a vegetable acid or salt, by virtue of which it has a general sedative action?

What has been said refers to the ripe fruit in good condition; if it is not perfectly ripe, or if fermentation has commenced, of course injurious consequences may follow its use. Also the largest melon is the best, if it is ripe and fresh. A generous supply is necessary to obtain the curative effect. In two or three cases which have come to my knowledge, the fruit was eaten *ad libitum*. One of these, a gentleman, is in the habit, when troubled in summer with a commencing diarrhœa, of eating largely of the best and largest watermelon he can find; he says it invariably checks the diarrhœa, which afterwards gives him no more trouble.

A lady had suffered from a diarrhœa, which was growing worse; she had decided to take medicine in the afternoon. At dinner she eat watermelon, and thought no more of the diarrhœa. She had one passage after dinner, eat watermelon again at tea, and was afterwards entirely free. Usually, she says, it is necessary for her to take medicine.

A medical friend mentioned to me that he had seen the beneficial effects of watermelon in his own experience.

Will others give an account of their experience in this respect, or try the value of this remedy. It would certainly be one of the pleasantest medicines we could prescribe to tell our patients to eat as much watermelon as they desire. Would it not, too, be a refreshing and beneficial diet in cases of fever or feverishness? We give lemonade and neutral salts, why not give watermelon?

This subject brings to mind another of kindred nature. Many persons have a horror, a dysenteric dread of fruit; they never eat any themselves, nor do they allow their children to have any. Is this consistent with perfect health? Do we not need and crave during warm summer weather the acid contained in our summer fruits? It seems not unreasonable to suppose that where all fruits are shunned, the system may acquire unhealthy tendencies and really be less able to resist injurious influences, and so there may be more liability to derangement of the *primæ viæ*. Another view worthy of consideration is that children have this craving for fruit, and if it is not gratified at home, they will indulge in unwholesome fruit, unripe or fermented fruit away from home; whereas if ripe, fresh fruit is furnished on the home table, they are not likely to partake of other—they will prefer the good to the green and rotten.*

A CASE OF MOVABLE CARTILAGE IN THE KNEE-JOINT.

Read before the Middlesex East Medical Society by the late Dr. Benj. Cutter, of Woburn.

[Communicated by Dr. E. Cutter.]

On the morning of Christmas day, 1845, I visited Thomas Brydon, an Irish laborer, aged 25 years, and found him in bed with a lame knee which wholly prevented walking, and was by the patient ascribed to rheumatism. The knee was somewhat swollen, and had troubled him in the same way, at times, about eight or ten years.

On examination, ascertained the existence of a movable body within the cavity of the knee-joint. The foreign body was small, and by manipulation was displaced from its position between the femur and tibia, so as to allow free movement of the joint. After explaining the nature of the difficulty to the patient, he went, as he had intended, to spend his Christmas in Boston. Eight days after, he called and said he had consulted at Boston with an Irish Doctor, who prescribed blisters to the knee, which had been done. Being satisfied that this treatment would not avail, he wished to have the operation performed. Accordingly, prescribed a purge, a vegetable diet, and rest, and three days after, January 5th, 1846, visited him, and found the loose body on the outer condyle, side of the joint; succeeded in moving it to the other side of the patella to the inner condyle and the spot I wanted to fix it in. Had him undressed, placed on a straw bed, the loose body *securely* held in place by the assistant (Ephraim, æt. 13), by an opened scissors bow; an incision, an inch long and deep, was sufficient to give exit to the foreign body.

Before the incision was made, the cutis

* *Cave canem!* The exclusion of the unripe and wilted fruit should be insisted on in the interest, at least, of the doctor. The spoiling of our sleep in summer time has most often been caused by cases of "purging up and down," from eating watermelons—in bad condition they were, we have generally believed; though for *obvious reasons* the point was difficult to ascertain.—Ed.

was drawn up, so that, after the removal, and the skin was allowed to resume its usual place, the cuts in the capsule and the cutis did not correspond. Very little blood or synovia escaped. The cut was dressed with adhesive plaster, on which was applied a small compress of cotton-batting, and swathed tight with a roller bandage. Wet the whole with cold water, and applied a piece of ice thereon. His pulse was 60, and full. Enjoined perfect rest, and liquid farinaceous food. The body removed was of an irregular roundish form, about the size of a kernel of green Northern round maize. One side cartilaginous, and smooth, the other uneven, and osseous; was not attached anywhere, as they sometimes are found.

The operation was performed at 2, P.M. Saw him at 9, P.M., and learned that considerable pain for two or three hours followed the removal, which now had mostly subsided; knee sore, leg too warm, countenance serene and quiet, pulse 60. Wet the dressings with tinct. opii and applied ice. Insisted on perfect rest and quiet; did not loosen the bandage.

Jan. 6; 10, A.M.—Pulse 56. Slept well through the night; quiet this morning. Took off the roller bandage, and cotton compress, and found no blood from the wound, no swelling of the knee, and no pain on slight pressure. Bled him from the arm 16 ounces, and put the tailed bandage over the knee. At 6 o'clock, P.M., pulse 60, and all things remain quiet.

Jan. 7; 11, A.M. Pulse 68. Last night slept five or six hours, besides sleeping some yesterday. Find him generally warm all over, especially his leg and knee. The joint somewhat distended with synovia, none of which has escaped from the cut, and the adhesive plaster remains tight. No application has been made to the knee through the night, his wife having slept. Bled him 30 ounces and wet the bandage with ice-water. After bleeding, the pulse was 72, and faintness and weakness followed for some time. Diet, thin gruel, milk and water, no thirst. One dejection yesterday. 6, P.M. Pulse 72. Less heat than in the morning before being bled. Knee some swelled, and itching. Wet the bandage with tinct. opii, and directed snow to be applied if heat continues. Has not suffered pain in the knee since two or three first hours after the operation.

Jan. 8; 9, A.M. Pulse 68. Slept most of the night. Feel of the skin, a little too warm; complained of some chillness. Distention with synovia not so great; no weeping from the cut. Wet the bandage with tinct. opii. Apply cold water, if there is more heat, and take a laxative. 6, P.M. Pulse 64. Slept one hour to-day; has less heat than in the morning. Medicine has not operated. Repeat. The knee more swelled, no soreness, no pain. The knee to be kept wet with water of the temperature of the room.

Jan. 9; 9, A.M. Found him asleep. Pulse 69. Did not sleep till midnight, when he had one dejection. Found his knee swelled as before; said there was one spot a little sore near the cut. The heat of the body and leg a little more than natural. Found that his knee had not been wet for nine or ten hours. Directed it to be wet, and a small piece of ice to be kept on the sore spot. 5, P.M. Pulse 64. Has had three dejections since morning, and two naps of two hours each. Thinks he can can eat the quart bowl of gruel his wife has prepared for him. His knee remains nearly the same, and the sore spot mentioned in the morning is not felt. Wet the dressing with cold water, and keep still.

Jan. 10, A.M. Pulse 59. Slept most of the night. P.M. Pulse 54. Sick of gruel. Knee less swelled; rice to-morrow.

Jan. 11, A.M.—Pulse 64. Slept well. Cavity of knee joint less swelled. Raised his own leg to place under the knee a clean folded sheet. Looked at the wound for the first time, and found it healed by the first intention. Replaced the plaster, wet with water and ice. Had his rice. 6, P.M. Pulse 60, quiet.

Jan. 12; 4, P.M.—Pulse 60. Two dejections in twenty-four hours. Slept all night. Hungry. Ate apples; took off plaster; synovial swelling quite gone. Ordered vegetable soup.

Jan. 13.—Pulse 60. No soreness except on bending the knee to a right angle. Two dejections.

Jan. 14.—Pulse 64. Using the knee abed. Sleeps well. Hungry.

Jan. 15.—Sitting up. Has been out ten rods to a neighbor's. Knee a little stiff.

Jan. 16.—Walked up in town one third of a mile and back.

Jan. 17.—Went to Boston, well. Went to work, and has had perfect use of the joint ever since. Was out in ten days.

In a note appended to the above case, Dr. Cutter states that several similar cases came under his notice. No wounds need more close attention, but inflammation could usually be prevented by proper care—cold

water, venesection and perfect rest. Small bodies are more annoying than large, being liable to get between the femur and tibia and throw a man down.

Selected Papers.

ON THE IMPORTAMCE OF THE STUDY OF PHYSICAL SCIENCE IN MEDICAL EDUCATION.

An Address delivered at St. Mary's Hospital, May 22, 1869, by Wm. Robert Grove, Esq., Q.C., F.R.S.

In Two Parts.—Part I.*

When the honor of presiding at this meeting was proposed to me on the ground that, having devoted some time and thought to physical science, I might with effect urge its importance for medical education, the task seemed an easy one; and, in a weak moment, I yielded to the temptation. On thinking the matter over, however, I found, too late for escape, though not for repentance, that the axiomatic truth of the thesis on which I was to discourse formed its great difficulty. Euclid could not prove that things which are equal to the same thing are equal to one another in any other way than by stating the proposition. How is one to urge the importance of a branch of study in aid of that profession which depends entirely on that branch of study? Medicine without chemistry and physiology, surgery without anatomy and mechanics, would indeed be the play of *Hamlet* with the part of Hamlet omitted. I must, therefore, take another starting-point; and, assuming that all connected with these schools are as fully convinced as I am that the study of physical science is the basis of medical education, I must rather address myself to those without, and endeavor to show what the healing art would be without science.

The following anecdote, in Faraday's own words, furnished to me by my friend Dr. Bence Jones, will not be a bad illustration:—

"July 24th, 1819, Machynlleth, Merionethshire.—I wanted a little alcohol; and, having found out a doctor's shop and a spruce doctor's man, got some. I then asked for a little spirits of salts, hoping I could have it in a glass stoppered bottle. The man found me a bottle, having emptied one of his preparations out of it, and would then have poured in acid; but it was not the acid I wanted, and I again mentioned spirits of salts to him, willing to allow everything to the possibility of his ignorance of the scientific name, but at the same time adding 'muriatic acid,' to save his credit, if possible. He now seemed to understand me; and, reaching down another bottle, again prepared to pour, but I stopped him. 'It is muriatic acid that I want.' 'This is muriatic acid, sir.' 'No; that is nitric acid.' 'They are the same, sir.' 'Oh, no; there is a little difference between them, and one will not do for me as well as the other.' I then endeavored to explain that the one came from nitre; the other from common table-salt. He comprehended a difference between these two bodies, but not between their acids; and he brought out a *Pharmacopœia*, and, opening it at Muriatic Acid, uttered the Latin name and synonyms fluently and with great emphasis, endeavoring thus to prove to me the two were alike. I was really ashamed to correct the doctor; and, if I had not been under the necessity of vindicating my contradiction of him, should have left him in ignorance. However, at last I made him comprehend, from his own book, there was something like a difference between these acids; but I don't think he shut the book much improved by the affair. I could scarcely afterwards look at the man. If he had any feeling—he appeared to have a considerable stock of pride—he must have felt himself extremely lowered in the eyes of strangers, and before his own companion, who was standing by. I began to rummage his bottles for muriatic acid myself; but I must do him the justice to say he first found out what little they had (about an ounce), and that he really compared it with the nitric acid—I hope for information, though the object professedly was to show me how like they were. Is it not strange that a man so ignorant of his profession should still appear respectable in it; or that one so incompetent should be entrusted with the health and lives of his fellow-creatures? Had I seen nothing more than his harshly dictatorial manner to a poor woman who came in with a prescription and a bottle in her hand, I should have concluded him to be a man who had attained the utmost knowledge of, and confidence in, his art. Seeing what I did, I cannot enough condemn the being who, without a knowledge even of the first requisites of an honorable but dangerous profession, assumed to himself its credit and its power, and dashed at once upon human life with all the

* This article was sent to us with the recommendation that it be republished in the Journal.—Ed.

means of destruction about him, and the most perfect ignorance of their force."

Another instance of the dangers of ignorance occurred to myself twenty-five years ago. Suffering from an illness for which strong doses of opium were required, I obtained a prescription which concluded with the words "quartâ quâque horâ sumendum." Fortunately for me, though perhaps not for you, I read it; for, when the bottle came, it was labelled, "To be taken every quarter of an hour," which direction would have given me sixteen times the prescribed quantity; and, had I followed it, you would have been spared the trouble of listening to me to-day. Another not uncommon mistake arising from ignorance of chemistry was that, in prescriptions of two or more substances, each of which singly was known to produce a certain effect on the human body, the practitioner considered that by mixing them he would get the effect of each; whereas, if even a slight chemical change took place on admixture, the resulting compound or precipitate produced a totally different effect from any of the components, and was, consequently, injurious, if not fatal.

If there be one species of cant more detestable than another, it is that which eulogizes what is called the practical man as contra-distinguished from the scientific. If by practical man is meant one who, having a mind well stored with scientific and general information, has his knowledge chastened, and his theoretic temerity subdued, by varied experience, nothing can be better; but if, as is commonly meant by the phrase, a practical man means one whose knowledge is only derived from habit or traditional system, such a man has no resource to meet unusual circumstances; such a man has no plasticity; he kills a man according to rule, and consoles himself, like Molière's doctor, by the reflection that a dead man is only a dead man, but a deviation from received practice is an injury to the whole profession.

The anecdotes with which I commenced, though doubtless not applicable to the present day, or to this metropolis, show the frightful power which is wielded by medical men. How many fatal blunders may occur we know not, for those who commit them are generally careful to keep the eleventh commandment, viz., "Thou shalt not be found out." How much harm, however, must have been done, not by ignorance such as this, but by what I may call accredited ignorance, *i.e.*, by received modes of treatment, which the intelligent practitioner despised, but dared not depart from. The practice has so recently ceased that I can hardly venture to remark on it, by which a medical man was paid only for and in proportion to the quantity of drugs he administered; so that in very many cases—in all, more or less—the most honest practitioner could only support his family by giving sham medicine, or that which would produce no ill effect. Even this was difficult, as I need not tell you that a glass of water does harm if it is not wanted. What injury, again, you now know to have been effected by the blind and almost compulsory following of systems—from the time of the Dogmatists and Empirics to the phlogistic and antiphlogistic doctors, and from them almost to the beginning of the present century—what terrible results must have followed from ignorance of physical science, and of its judicious application to medicine!

Physician, *i.e.*, student of nature; but what is nature? Not a personified existence, as she is apt to be conceived, but simply what is, what we observe, or what we deduce or generalize from observed phenomena. Observation teaches us, when directed to organic beings, that they have an adaptability to circumstances, arising, probably, from long-continued adaptation; but the limits of this adaptability are exceedingly difficult to ascertain. To know when and to what extent change will benefit, and when it will injure or destroy, requires the highest skill of the experienced and scientific physician. The so-called nature of the hot-house grape, of the domestic cow, differs from that of their wild congeners—they suffer from different diseases, and require different remedies.

What is disease? Speaking crudely, is it anything but too sudden a departure from uniformity of action? The function of the whole or of some part of an organism is rapidly accelerated or impeded; the other organs cannot keep pace with it; the structure becomes changed, because those motions which preserve its form, those secretions which feed it, are out of time with it; and either the destruction of the organism, or the setting up of a *quasi* independent life, ensues. Things have become what they are by slow alterations during ages, and their power of adaptation will not bear sudden changes. What can enable you to detect and to remedy this? First, a knowledge of the function of the body in its healthy state; second, a knowledge of the cause of the derangement. Can you proceed one step in these inquiries without a knowledge—ay, a profound knowledge—

of physical science? Could we tell, without a knowledge of chemistry, only attained in the present century, why train-oil is good for the Esquimaux and rice for the Oriental? Until a few years back, we did not know that fat, and not lean meat, was the best food for those who undergo great but rather sudden physical exertion; and even now we do not know how much sugar, starch, or fat, and how much nitrogenous food are suitable for given habits; how much lime, how much phosphoric acid, &c., are required; for a man without bones would not succeed, and bones cannot grow out of nothing, or substantially from other elements than their normal constituents. The sportsman's appetite may guide him with tolerable accuracy, but you have to treat the lawyer and the statesman, and to tell them how they are to economize their powers under the most trying changes of condition. And your difficulty is the greater that you are not allowed to experiment. If a physician could select, say ten patients laboring under similar disorders, and apply a different mode of treatment to each, he would greatly promote the science of medicine; but he would, doubtless, be sentenced to penal servitude for manslaughter.

Of the first two steps to physical science—observation and experiment—one is, to a great extent, denied you. How can you supplement it? Very feebly, I own. You have, to some extent, *post-mortem* dissection, and you have comparative anatomy and physiology; but you have a little more: you may substitute for experiment, observation of individuals; or, better still, of classes, placed by their necessities under circumscribed conditions. Thus the miner would give you some aid as to what degree of health was compatible with exclusion from light and respiration in an abnormal air; and what diseases are produced by such conditions of existence. The fisherman could assist you as to what are the effects produced by a fish diet, &c. Indeed, there is some scope for individual experiment. Fick and Wislicenus made valuable experiments on themselves in their ascent of the Faulhorn. Regnault made valuable experiments on animals (hardly chargeable, like vivisection, with cruelty) by keeping them in different gases, and supplying them with special food.

Physical science applied to these cases is at present in its infancy; but can anything else do anything? It provokes me to hear classically educated men speak in patronizing terms of the introduction of physical science into general education, such as, "I do not object to physical science; I have no prejudice against it." Why, you might as well object to breathing, to eating, to seeing.—*British Medical Journal.*

Hospital Reports.

BOSTON CITY HOSPITAL.

Surgical Cases in the Service of Dr. GEORGE DERBY. Reported by Mr. GEO. B. STEPHENS, House-Surgeon.

Amputation of Thigh for Injury; Death from Pyæmia.—April 22. J. L., æt. 35. The patient's right leg was caught between an elevator and its supports at the side, breaking off and extensively comminuting the tibia and fibula just below their heads, the fracture of the former extending into the knee-joint.

On the following day, the thigh was amputated by Dr. Derby, just above the knee, by the circular method. The skin of the flaps was extremely tense. Nine ligatures were applied, the flaps brought together with silk sutures, and the face of the stump covered with a cold compress and a tight bandage. Stump elevated on a pillow. Patient ordered ℥ss. tinct. opii on recovery from ether, to be repeated at night. He recovered from the ether well, and the reaction which followed was but moderate.

Three days after the operation the sutures were removed; the edges of the flaps were then looking black and sloughy. May 4th, eleven days after the operation, with the exception of two, all the ligatures, including that upon the femoral artery, came away. For a little more than three weeks everything went on as favorably as could be expected; a large abscess formed on the outer side of the thigh, but incisions evacuated it; the sloughs of the flaps separated, and the face of the stump presented a healthy granulating surface, which became very much contracted; the patient's appetite and spirits were good, and everything seemed propitious. But on May 17th, the twenty-fifth day after the operation, the patient was seized with a severe chill in the morning, and again in the afternoon. No unfavorable symptoms followed close upon the chills, and as he had been subject to them previously, after exposure to the influence of malaria, a favorable termination was still looked for.

For a week longer the course of events was all that could be desired. The edges of the stump continued to contract; the

patient's condition was excellent. May 24th, he had another chill; vomiting, diarrhœa, and pain in the abdomen, which was somewhat tympanitic, followed. Pulse, 160. He was freely stimulated, and received nourishment at short intervals; after each dejection, starch and laudanum enemata were administered. May 26th, the discharge from the stump had nearly ceased, and its face presented a dry, shiny appearance. The stimulation and nourishment were continued, and the diarrhœa followed up with opiate enemata. The patient was now but semi-conscious; he died on the morning of the 27th, the fourth day after the pyæmic symptoms showed themselves, though the chills of the 17th might be considered premonitory.

Amputation of Thigh for Chronic Disease of the Knee-joint; Death from Pyœmia.—April 21. W. V., æt. 38, laborer, entered with disease of the knee-joint of long standing, consequent upon a blow received years ago. There was considerable enlargement of the joint; sinuses communicated with it; the leg could not be flexed.

During the following four weeks subcutaneous abscesses about the knee were first evacuated; then sinuses communicating with the joint were freely laid open. The discharge was profuse, and the drain upon the patient very evident. Having refused amputation for some time he finally consented.

The thigh was amputated, by Dr. Derby, at the lower third, by the circular method, on the 21st of May. An unusual number of vessels required ligatures. Silk sutures; cold compress; tight bandage. May 23d, the bandage was removed from the stump; the flaps were in perfect apposition, with no tension from the sutures. May 26, the patient had a severe chill; the removal of the sutures let out a considerable amount of very thin, watery pus. On the following day he had another chill; stump continued to discharge an abundance of thin, offensive pus. The pulse was small and feeble; the features pinched; the bowels constipated. No vomiting. He continued to fail during the three days following, though free stimulation was had recourse to. The discharge from the stump was of the same watery character, but decreased in amount. On the 29th, he was semi-comatose, and on the 30th died, the fifth day after the first chill. He at no time had vomiting or diarrhœa.

Operation for Ununited Fracture of the Lower Jaw; Death from Pyœmia.—April 27. J. G., æt. 24, was struck over the lower part of the face with an iron wrench; a fracture of the lower jaw at two points was thus produced—one on the right side in a line with the angle of the mouth, the other on the left side just in front of the angle of the jaw. For nearly two weeks the ordinary treatment for this injury was pursued; on one side the teeth were wired; on the other the absence of teeth prevented this procedure from being adopted. A gutta percha splint and various bandages were applied. One of the teeth wired came out on the eleventh day after the patient's entrance; union had not even commenced at either point of fracture.

May 8th, the twelfth day after entrance, Dr. Derby cut down upon the jaw at the two points of fracture, and wired the fragments together. Following the operation the face became enormously swollen, the upper eyelids infiltrated with serum, and abscesses formed at various points about the face and neck. The knife was used wherever pus was confined, and once or twice for the relief of the tension merely. Nine days after the operation, the œdema of the face had nearly subsided. The fragments had been kept in good position by the wires and a gutta percha splint beneath the chin, but no union had resulted. Eleven days after the operation the patient was evidently growing weaker, and symptoms pointed to the chest as the seat of trouble. On the afternoon of May 20th, the thirteenth day after the operation, he died.

He was not known to have had any chills, nor had he vomiting or diarrhœa. The autopsy showed between four and five ounces of yellowish fluid in the pericardium and lymph on its walls. In the right pleural cavity were three and a half quarts of a puriform fluid; the lung was thoroughly compressed against the vertebral column; at two points in the lung the tissue was degenerated, broken down and mixed with dirty-yellow pus.

Amputation of Thigh for Compound and Comminuted Fracture of Leg; Recovery.—July 14. The patient, a delicate boy, aged 6, was run over by a street-car. He was brought to the Hospital suffering from shock. Examination showed a compound and comminuted fracture of both bones of the leg at the middle third. On the posterior aspect of the leg the integument had been torn away from the knee nearly to the ankle, and through the rent thus made the muscles of the calf, very much torn, protruded. On the front of the limb were two openings communicating with broken bone.

The hæmorrhage had been but slight. A stimulant enema was administered.

The thigh was amputated, by Dr. Derby, just above the knee, by the circular method. Five vessels were tied. The flaps were brought together by silk sutures, and over the face of the stump a cold compress and tight bandage were applied. During the operation the patient was so low as to require two stimulating enemata. For three hours after the operation his pulse was scarcely to be felt, but at the end of that time (8, P.M.) he had nearly recovered from the ether and reaction had fairly begun. Fifteen drops of tincture of opium were given. The case progressed most favorably; the sutures were removed on the third day; the ligatures all came away on the eighth and ninth days; nearly three fourths of the flaps united by first intention. The only symptom at all unfavorable was a small collection of pus at the outer corner of the stump; a small poultice so promoted the discharge at this point as to dispel the threatened abscess. July 30th, sixteen days after the operation, the patient was discharged; the flaps had entirely united, except at two small points, which were granulating.

Medical and Surgical Journal.

BOSTON: THURSDAY, AUGUST 17, 1869.

THE PART PERFORMED BY NATURE AND TIME IN THE CURE OF DISEASES.

THE twenty-fifth volume of the "Library of Practical Medicine," published by the Massachusetts Medical Society, consists of three dissertations. The Preface tells us that—

"The following Dissertations were sent to the 'Prize Committee' appointed by the Massachusetts Medical Society, in answer to the question proposed for 1868:—'The Part performed by Nature and Time in the Cure of Diseases.'

"For this prize the sum of one hundred dollars had been placed at the disposal of the Society by the liberality of one of its members, who afterwards learning that more dissertations than one were thought worthy of the premium, generously offered to furnish two other prizes of like amount, should the Committee consider other dissertations offered to be worthy of such distinction.

"The Committee then reported that they had received a number of essays, three of which they adjudged worthy of prizes, severally indicated by the three following mottoes:—

"'*A true announcement of the law of Creation, if a man were found worthy to declare it, would carry Art up into the kingdom of Nature, and destroy its separate and contrasted existence.*'

"'*Nature dominant—Art ancillary.*'"

"'*Ingenuas didicisse fideliter Artes*
Emollit mores nec sinit esse feros.'"

"At the Annual Meeting of the Society, June 3d, 1868, the Secretary of the Society, in open meeting, broke the sealed packets, and the authors were found to be Robert T. Edes, M.D., of Hingham, Mass.; James F. Hibberd, M.D., of Richmond, Indiana, and John Spare, M.D., of New Bedford, Mass.

"The Dissertations were then, by vote of the Society, referred to the Committee on Publications. This Committee, while believing that the publication of the Dissertations would be of great service to the cause of rational medicine, felt constrained to forego so desirable an object on account of want of funds at their command for the purpose, whereupon the same liberal donor* offered to supply the deficiency—amounting, as it proved, to two thirds the expense of publication."

As many of the subscribers to this JOURNAL do not see this volume, we think the papers which have received so much honor deserve some notice here.

The first dissertation of the series of three is by Dr. Edes, of Hingham, Mass. It contains an elaborate survey of diseases and traumatic lesions, with regard to their greater or less tendency to recovery. As preliminary to the investigation of the part played by nature in the cure of diseases, he considers—

"What we shall, for our purpose, take nature to mean. All the surroundings of a sick man, the air he breathes, the food he eats, his clothes, his bed, as well as his medicines or dressings, and his constitution, hereditary or acquired, have their influence on the result of the disease; and yet, no matter what the other influences brought to bear, he would be spoken of in

* Announced at the Society's dinner to be Dr. Jacob Bigelow, of Boston.

common parlance as left to nature, if he took no medicine, or were under no definite plan of treatment; yet if a fever patient, how different his condition, whether his excreta be allowed to remain or be immediately removed, and his apartment ventilated; or if he be affected with phthisis, what air he breathe, or what food he eat; or if a surgical case, whether his bed be good or bad, or whether he keep still or walk about.

"Abundant instances may be found to show how very marked and favorable an influence ventilation, even to the extent of treating patients in a tent, has over the course of typhoid and typhus; yet, to the minds of the uninstructed at least, the hospital would seem as natural an abode as the tent.

"It is manifest that these changing elements must be excluded, and we must consider nature to mean the pathological character and tendency of the special disease, combined with the constitution of a given patient, and, as far as possible, without regard to any external circumstances.

"Suppose the course of any disease to be represented by a curve, of whose function the chief independent variables are the force of the disease and the force of the patient, and other circumstances come in as co-efficients to influence within certain limits the result. The form of the function may be such (it is not always so simple as x–y)* that either variable may almost wholly determine its value, whether it shall at any point become equal to zero. It is the form of this function, without regard to the co-efficients of external circumstances, food, air and medicine, which we may consider to be nature. Each disease has its special function, which is to be determined by eliminating, so far as we can, the disturbing and accidental elements."

In the concluding portion of the essay, he says:—

"The proposition that in many cases nature has a very strong tendency to cure, in others makes some attempts, sometimes successful, sometimes unsuccessful, and in others still makes none that we can see, does not need to be proved, but only suggested; although the extent to which we may rely upon her assistance in individual cases is often a fair question of discussion, only to be settled upon the basis of careful observation, not necessarily by doing nothing, but by watching in an unprejudiced spirit the course of disease and the action of remedies. * * * * *

"A general indefinite belief in nature's power to cure disease and in our own slight control over it, would lead to little practical result, except a diminished feeling of responsibility and a disinclination to interfere; but an accurate and careful study of nature's methods furnishes the best and only reliable foundation for rational and efficient therapeutics.

"The advantages are many of an appreciation, both within and without the profession, of nature's part in the cure of diseases.

"I. Pure science is advanced.

"II. The use of our present means of healing will be rendered more precise, and therefore more efficient.

"We may distinguish several plans of treatment according to their relations with nature's methods.

"(*a*) Of those which follow nature more or less closely.

"1. Pure expectancy, combined with attention to hygiene, and, if necessary, palliatives. (Those cases in which the diet has a specific effect, as especially in scurvy, are not to be considered as treated by the expectant method.)

"2. Supporting treatment; whose object is to keep the patient alive while nature has time to complete her processes.

"3. Adjustment and arrangement; removal of obstructions and diseased parts, allowing nature to complete the work; principally surgery.

"4. Eliminative treatment; helping the system to get rid of morbid material.

"(*b*) Of those which more or less oppose nature.

"5. Symptomatic treatment; where an attempt is made, by controlling some prominent symptom, to control the disease. This includes the antiphlogistic.

"6. Specific treatment.

"These plans are seldom used alone, but in various combinations with each other.

"Returning for a moment to the mathematical figure before made use of, we may consider the hygienic treatment to influence the form of the function by supplying the most favorable values for the co-efficients; the supporting, to place at its highest value the variable representing the patient's forces; the eliminative, to reduce the value of the variable representing the force of the disease to the lowest point consistent with existence of the function in its usual form; and the specific, as giving it an unu-

* Dr. Holmes uses, in "Currents and Counter-Currents," a somewhat similar illustration to represent the depressing effects of some active remedies.

sual form by reducing the last-mentioned variable to zero.

"III. The search for new methods of cure will be rendered easier and more successful from having a fixed standard of comparison, and from the less confusion of remedies. Less time and labor will be wasted in going over familiar ground. There is no reason why we may not reasonably expect, not only greater power of prevention, but actually a greater control over disease, than we now possess.

"IV. The true relation of the physician to his patient will be better understood, since his art will be as far from being considered powerless by the sceptical, as from receiving the blind, unreasoning, and often unfounded confidence of the ignorant.

"V. To descend to lower ground, a general understanding that the part of the physician is to be familiar with disease and acquainted with its natural course, not always to use active measures for a cure, will be a most efficient means for lessening the amount of more or less respectable quackery. The more people know of medical subjects and the more fully they are aware of the truths I have endeavored to enunciate, the less success can be looked for by shameless vaunters of panaceas, or by members of pseudo-scientific organizations, who cure self-limited diseases by specifics, and increase the value of their boasted triumphs by ignorant or fraudulent diagnosis. When the truth is popularly appreciated, in vain will such say to each other, in the words of the great satirist of our profession, "Soyons de concert auprès des malades, pour nous attribuer les heureux succès de la maladie, et rejeter sur la nature toutes les bévues de notre art.'"*

In the last of the three dissertations (that by Dr. Spare, of New Bedford, Mass.) a salient point is the discussion of the second of the two elements in the cure of disease—mentioned in the prize question—viz., *time*. On this head the Editor of the *Western Journal of Medicine*, in a notice of *Dr. Hibberd's* essay, makes the following point:—

"We object to the introduction of *Time* as one of the factors in the cure of disease. Dr. H. seems to make of it an entity, a positive force quite as much as any of those that have thus considered disease. What is time? Simply measured duration. During its flow certain events can transpire, certain processes be completed; but *per se* it has nothing to do with such events or processes—no more to do in itself with the recovery of a man from rheumatism in six weeks, than with the hatching of a hen's egg in three weeks; no more to do with either than with the Declaration of Independence on the 4th of July, 1776. The Cunard Steamer which takes our friend to Europe, will require a certain number of days in which to cross the Atlantic; but those days simply constitute a period during which the mighty power of steam, guided by the genius of man, can do a certain work. A boy learns a lesson in an hour, but the hour has no influence upon his mental processes. We would not esteem it a judicious title for a thesis upon the action of aloes—*Aloes and Time as a Cathartic.* We would rather have written the title of Dr. H.'s Essay, Nature *in* the Cure, Time *for* the Cure of Disease."

Now, Dr. Spare, in his paper, states the part which "time" plays as an element in *recovery* from—rather than a force in the *cure* of—disease. Thus, he says:—

"We pass rapidly over this mechanical law of motion and time, as in no plain sense vital or organic, and light next upon *growths* in nature, timed to seasons and days—and to a certain number of years—not only growths, but decays or resolutions of things grown, and various transformations. Nothing, whether vegetable or animal, is produced, unless a time-law enters as an element among the conditions. Not only is there a *duration* time-law for these growths, but a select *season* also for vegetable, and the lower forms of animal, dependent on the heat or cold of the territory where they inhabit, a season as dependent on rotation of the earth, or position of the sun. The habits and instincts of animals seem to be wonderfully conformed to season of manifestation. Birds of passage, when caged and in a foreign or factitious climate, manifest great commotion as the time-period arrives when they should migrate." * * *

"The subjects nearest analogous to human disease are human physiological states; most of which have a marked time-rate. Observe the periods of gestation, lactation, dentition, growth, puberty, manhood, decline, death; the heart-beat and its intervals, respiration and its intervals, alternate digestion and hunger, sleep and wakefulness, lapse of time in muscular exertion, then the corresponding tiresomeness."

Subsequently he goes on to the consideration of the "*duration* time-law" in pathology.

* Molière. L'Amour Medicin.

The intermediate essay—by Dr. Hibberd, of Richmond, Indiana—is to our minds a model of elegant and forcible diction and of terse expression. Dr. Hibberd begins by laying down certain propositions as axioms, which become the postulates from which he deduces his conclusions. We cannot do better than to give the author's summary of his paper:—

"*Summary.*—The prominent points presented in the foregoing dissertation may be enumerated as follows:—1. All vitalized matter is the subject of a law of development peculiar to its class. 2. Vital organizations are not active *per se*, but are endowed with a capability of activity under stimulation. 3. Normal stimulants produce physiological activity or health; abnormal stimulants produce pathological activity or disease. 4. Human maladies are always the result of abnormal stimulants acting on the histological elements of the body. 5. Disease in any part continues as long as the pathological stimulant is operative; when this ceases, the part returns to its physiological state. 6. To cure disease it is only necessary to remove the stimulant exciting it. 7. This stimulant is rarely known, and still more rarely can it be removed. 8. In most diseases we only recognize the grosser symptoms, after the initial processes have completed their course. 9. After the stage of recognition most diseases must pursue their course through a series of phenomena under an inexorable biological law. 10. The duty of the physician is to watch nature and assist her as opportunity may offer. 11. All perturbating medicines are themselves pathological stimulants, and should not be administered except under a certainty of abating a greater evil. 12. The present popular professional estimate of the medical virtues of drugs rests mainly on the vicious logic of *post hoc ergo propter hoc*. 13. That this estimate is erroneous is proven by: *a*. Curable diseases are recovered from in the absence of all kinds of drugs. *b*. Curable diseases are recovered from under the most diverse treatment. *c*. The adulteration of drugs makes their strength uncertain. *d*. The state of the patient's mind makes the operation of even pure drugs uncertain. 14. A recognition of the doctrine of the *vis medicatrix naturæ* must underlie all rational therapeutics. 15. The principle involved in this phrase has been recognized and deferred to, since the earliest historical era of medicine, and is likely to be immortal. 16. It derogates nothing from the physician, or the agents he uses, that nature is predominant and art opiferous."

The first seven propositions of the preceding summary would seem to amount to this—that the causes or essential elements of diseases are rarely known, and that, therefore, attempts to remove them are for the most part a groping in the dark.

The *Western Journal of Medicine*, however, takes the ground that Dr. Hibberd has exaggerated our ignorance of the causes of disease.

"True, undoubtedly, that we do not know the causes of very many diseases; but on the other hand, the physician daily sees cases of disease of which he does know the cause. For example, he meets with a case of convulsions in a child, which he traces to indigestible food in the stomach or intestines; or again, a case of epilepsy dependent upon chlorosis; or a case of cirrhosis resulting from the use of alcoholic liquors; or a case of menorrhagia from sexual excess, &c. &c. Now, will the good dame Nature, with her faithful attendant, Time, see to the removal of the offending matter from the child's gastro-intestinal canal? She probably will in five cases, but in the sixth the sufferer may die before the process is completed; and the physician does wisely who administers what our friend would call a *perturbating medicine*, an emetic or a cathartic, under such circumstances. In the second case, we remove the epilepsy by restoring the blood to its normal condition. In the third, we interdict the use of the agent which has produced the trouble, and endeavor to supplement at least a part of the hepatic function by ox-gall, *et cet.*, and we at least prolong the patient's days. In addition to the removal of the cause in the fourth illustration, we endeavor, both by hygienic and therapeutic means, to change the excessive determination of blood toward the uterus and ovaries."

The part played by *art* in the cure of disease is often underrated. Dr. Hibberd says:—"When a surgeon has distorted members of the body to restore, nature and time must be his chief reliance, and his appliances, whatever they may be, only serve to guide and encourage the physiological forces." It has been fairly asked, in reply, "what amount of physiological force will restore a limb flexed from anchylosis? Here we beg to claim that a Stromeyer's screw, or that gum-elastic bands, are worth

more than nature. So, too, the cicatrices from burns, causing deformity and hindering the usefulness of a member, frequently may be removed, and healthy integument placed upon the denuded surface,"* where, to be sure, nature makes it grow. Here the surgeon's art is of great importance—*nature* being, by a succession of processes requiring *time* for their accomplishment, capable of accomplishing only what he gives them the opportunity of doing.

The 16th and last proposition embodies the substance of Dr. Hibberd's remarks under the head of his "Conclusion." That passage seems to us so sound and well stated that we quote a considerable portion of it here:—

"Let no one for a moment imagine that the views herein promulgated have a tendency to undervalue the importance of medicine in the management of disease, or detract one iota from the responsibility, the dignity, or the usefulness of the accomplished physician.

"Medicines have a positive power that can be, and should be, made available to assist nature in the removal of pathological stimulants, and in the arrest of pathological activity. No one doubts the power of anæsthetics to abolish sensibility; of opiates to allay pain; of aloes to evacuate the bowels; of veratrum to lessen the heart's action; or of quinia to arrest malarial periodic disease. All these, and many more, are in constant demand for proper and prudent therapeutic purposes; and that all of them, not nutrients, and forcible enough to make an impression, are pathological stimulants and of themselves an evil, militates nothing against their legitimate use, or their positive value. It only signalizes that a wise judgment, a sound discretion, and a just discrimination should dictate and control their prescription, to the end that one evil should be brought into requisition voluntarily, only when it will, with certainty, assist to abate a greater evil. It is the training, the skill, the acumen, that is necessary to the exercise of a sound discretion and a wise judgment in the selection and administration of medicines, that distinguishes the good physician from the presumptuous pretender. One cannot attain to this accomplishment without a clear and intelligent insight into biology, both normal and abnormal."

[To be concluded in our next issue.]

* Western Journal of Medicine.

THE ALLEGED CASE OF DEATH FROM ETHERIZATION—LETTER FROM DR. POWELL.—The subjoined letter speaks for itself. The patient did not die in the presence of Dr. Powell. But Dr. Powell was erroneously informed, as it would seem, that death took place the following night. The letter of Dr. Cheever and the extract from the Hospital Records, in our issue of Aug. 12th, show that the patient underwent the operation immediately after having recovered from the "alarming symptoms" following the administration of the ether, and lived for *twenty days* subsequently. We presume the matter is now finally disposed of, and believe that we have yet to record the first case of death from etherization by sulphuric ether.

CHICAGO, Ill., Aug. 12, 1869.

MR. EDITOR,—Upon my return home this morning, I found your letter of date Aug. 1st, in reference to a paragraph in the Transactions of the Illinois State Medical Society, in which I am made to say that "I saw the ether administered to a patient in the hospital at Boston, Mass., who died directly from the effects of the inhalation."

The reporter of the proceedings of the Illinois State Medical Society, on that occasion, entirely misunderstood me. I did not make the statement as reported.

In a general discussion on chloroform and ether, I referred to a case that I witnessed at the Boston City Hospital, in which alarming symptoms occurred during the administration of ether. I stated that I was informed that the patient died the following night.

The case referred to occurred in February, 1868, was an old man, who was being operated on for stricture by Dr. Cheever, assisted by Dr. Thorndike. The ether was administered by one of the house officers.

Very truly, E. POWELL.

UTERINE DISPLACEMENT AS A CAUSE OF EXOPHTHALMIC GOITRE—LETTER FROM HENRY REYNOLDS, M.D., EAST WILTON, ME., IN REPLY TO A CRITICISM BY DR. BEACH.—*Mr. Editor:*—In Vol. III., No. 24, of the "Journal," I reported a case of "Uterine Displacement," which I considered to be the cause of the accompanying symptoms of a disease, which has been called exophthalmic goitre. The case was commented upon in the same number of the "Journal" by Dr. H. H. A. Beach, who considered that these

symptoms were not dependent upon the uterine disease.

As the case was under my observation, I had ample opportunity to observe the manifest dependence of the symptoms of the goitre upon the uterine affection; and since, in my report, I did not state fully my reasons for considering that this intimate relation existed, I feel that it is incumbent upon me to communicate those reasons. It seems to me that the evidence afforded by this case is sufficient to merit further investigation.

That uterine irritation is the most common cause of this form of goitre, I do not pretend to affirm upon the evidence of this single case, but that it may, in some cases, be the cause, and as such it is worthy of consideration. It is my object to direct attention to this as a probable cause in some cases, at least, that physicians may investigate the subject as they may severally have occasion. The rarity of the disease, and the impossibility of one physician's meeting with a sufficient number of cases to enable him to determine the most common cause, render it necessary that the question should be settled by the accumulated observations of individuals.

The patient, in the case referred to, had been suffering for ten years, from disordered menstruation and other symptoms of uterine disease, and had been anæmic, debilitated and emaciated during that period of time, but was so as to be able to be about most of the time. The palpitation of heart began to trouble her a few months before the enlargement of the thyroid was noticed, and the symptoms of uterine disease seemed aggravated at about this time. The difficulty in walking, pain in the lumbar region, sense of weight and dragging down in the bowels, increased menstrual flow, were among her uterine symptoms.

Tincture of iodine was applied to the enlarged gland for some time before my treatment was commenced, but it did no good.

The case came to me in July of 1868, and I treated her medicinally for the bronchocele and for the "bunch," which was situated two inches to the left of the left nipple, and which had excited fears that it might be of a cancerous nature. Gave her tinct. conium maculatum, in drachm doses, three times daily, to correct the disordered nutrition, and continued it for about six weeks, but without apparent effect upon the bronchocele. Other treatment as seemed adapted to the requirements of the case was tried with a like result. In November of the same year, having failed to affect the disease by medicine, I determined to address my treatment to the uterine disease. The uterus was enlarged and prolapsed. Inserted one of Hodge's double curved lever pessaries, and gradually the uterine symptoms yielded, and as the uterine disease became relieved the bronchocele and prominence of the eyes subsided and disappeared.

The goitre disappeared before the patient entirely recovered from her uterine disease. It seemed that the goitre symptoms were due to an aggravated form of uterine irritation, and when that was relieved to a certain extent the goitre subsided. Dr. Beach, in his comments upon the case, says: "The theory of the uterine lesion standing in the relation of a cause to the main symptoms (bronchocele, prominence of the eyeballs, and inordinate action of heart), does not seem tenable if we consider that there was an enlargement and a prolapse of the uterus at the time the treatment was commenced; that when the report was made the prominent symptoms had subsided, but 'some uterine enlargement' remained, and the prolapse was controlled by the pessary." And also because the uterine disease had so long existed before the symptoms of goitre appeared.

The fact that the uterine disease had existed for a long time previous to the accession of the goitre symptoms, does not preclude it from being the ultimate cause. It is a common occurrence for a woman to be affected with a displacement of the uterus, with no symptoms whatever referable to it, for some time, perhaps years, until some change occurs which renders the displaced organ irritable, when uterine symptoms are manifested; it may be in a mild form for a time, until another aggravation of the disease takes place, when the disease may become so severe as to confine the patient to her bed, and powerfully impress the system with reflex disturbances. Yet it would not be philosophical to say that, because at first the uterine lesion occasioned no symptoms, it could not have been the cause of the subsequent stages of the disease.

So, in like manner, the degree of irritation and disturbance of the nervous system which had existed during all this time previous to the appearancee of the symptoms of goitre, apparently was not sufficient to induce the bronchocele, but an increase of the uterine disease so disturbed the system as to produce the goitre, and when means were used to relieve the uterine disease to such a degree that it did not exceed in intensity what it had been formerly, the goi-

tre disappeared for want of a *continuing cause*. It must not be taken for granted that, since the uterine disease had existed prior to the accession of the goitre, and, in some degree, remained after the goitre disappeared, it did not cause it. It would have been expected, *a priori*, that symptoms so grave would not have been manifested for some time, perhaps for years, and that the most grave symptoms of the disease would have been the first to disappear during the cure.

Therefore, there is nothing in the history of the case to militate against the theory that the uterine disease caused the goitre; but, on the contrary, that history affords strong evidence in support of the theory. The connection of the two diseases appears to be intimate, the goitre coming on as the uterine disease advanced, and being checked and disappearing when the uterine disease was relieved. It seems to me that the evidence of the relation of cause and effect existing between them is about as strong as *one case* can render it.

It is my desire that this subject should be thoroughly investigated, that the truth may be attained. If uterine disease be the cause of a portion of the cases of exophthalmic goitre, surely something then will be obtained towards the understanding of so obscure a disease, and enable us to adopt a rational course of treatment in that portion of cases, with the best prospect of success.

LETTER FROM DR. TREADWELL, OF BOSTON, IN REPLY TO A CRITICISM OF DR. REYNOLDS'S CASE OF UTERINE DISPLACEMENT, &c.—*Mr. Editor*,—Notwithstanding the able criticism of Dr. Beach upon the report of the case of "Uterine Displacement" contained in the JOURNAL of July 15, I cannot see why the existing uterine lesions did not stand in a "causative" relation to the succeeding train of general symptoms. The case in the end may have been, and indeed was, one of those presenting the characteristic group of symptoms which, combined in the same case, constitute what is known as Graves's disease, or exophthalmic goitre; but it can hardly be denied that all of these symptoms in the present case may not have been produced by the uterine lesion. Trousseau and other writers consider Graves's disease as belonging among the functional affections of the nervous system, or the neuroses, and it might naturally be expected that all of the symptoms belonging to this disease might be produced by pathological conditions of the uterus acting as a source of irritation to the sympathetic system; and indeed such cases have been observed and recorded. Trousseau gives two cases, in which the suppression of the menstrual function was intimately connected, and seems to have stood in a causative relation to the development of the disease in question. The same author relates another case in which suppression of the menses was the exciting cause of this disease. I quote the following from his lecture upon this subject:—"Bearing in mind," says Dr. Gilbert-d'Hercourt, in his relation of the case, "that all the relapses of Mrs. B. had been preceded by a diminution or a complete suppression of the catamenia, he decided on carrying out the hydropathic treatment in such a way as to bring on congestion of the uterus, and thus produce a healthy revulsion." * * * "In 1857, in the month of June, she had another relapse, or rather a fresh paroxysm, preceded by suppression of the menses."* In regard to treatment, Trousseau dwells upon "the necessity of re-establishing menstruation," considering it "an important therapeutic indication."

Aitken says:—"It"—exophthalmic goitre—"co-exists with wasting discharges, or supervenes upon them; such as in leucorrhœa, menorrhagia in females, and hæmorrhoids in males."†

Dr. Graves, in writing upon the disease which bears his name, remarks:—"The well-known connection which exists between the uterine functions of the female and the development of the thyroid gland observed at puberty, renders this affection worthy of attention, particularly when we find it so closely related by sympathy to those palpitations of the heart which are of so frequent occurrence in hysterical and nervous females."‡

I am sorry to differ from Dr. Beach, but it seems to me that the fact that the uterine lesions preceded the development of the symptoms of Graves's disease, and the additional fact that the latter subsided as the uterine troubles were relieved, show that "the theory of the uterine lesion standing in the relation of a cause to the main symptoms (bronchocele, prominence of the eyeballs and inordinate action of the heart)," is perfectly "tenable" and correct. J. B. T.

POISONING WITH PETROLEUM.—At a meeting of the St. Clair Co. (Mo.) Medical Society, Dr. Meyer reported the case of a child, eighteen months old, poisoned by the administration to it, by another child, of a tablespoonful of petroleum. It was cyanotic, and respiration had ceased. By enemata of vinegar, dashing cold water over the face and chest, warm friction of the extremities, and perseverance in "Marshall Hall's Ready Method," respiration was re-established, and, after violent emesis of petroleum and coagulated milk, following the forcing into the stomach of warm milk with yolk of egg, the case terminated favorably.—*Medical Archives.*

A TESTIMONIAL is to be raised to Mr. Syme by his former pupils. It is thought a marble bust and a Surgical Scholarship would be appropriate. Dr. Murchison, of London, will be glad to receive names.—*Medical Press and Circular.*

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* Lectures on Clinical Medicine. A. Trousseau. Translation New Sydenham Society, 1868, pp. 567, 580, 589, 590.

† The Science and Practice of Medicine, William Aitken, M.D., 1866, p. 812.

‡ Practice of Medicine, Robert James Graves.

Medical Miscellany.

ACKNOWLEDGMENT.—We are indebted to Dr. Beach for the description of the Carney Hospital in our last issue.

We take occasion to say also that the feeling tribute to the memory of the late Dr. Swett in the Journal of August 5th was from the pen of Dr. J. B. S. Jackson.

ANTI-QUACKERY.—At a meeting of the Orleans County (Vermont) Medical Society, held last week at Newport, it was resolved that it was the duty of the State Legislature to pass such laws, with penalties attached, as shall prevent all persons from engaging in the practice of medicine or surgery who have not diplomas from medical colleges legally authorized to grant the same, and such as will protect the people against imposition from itinerant pretenders.—*Boston Daily Journal, August* 12, 1869.

CARUNCULÆ MYRTIFORMES.—M. Demarquay, commenting upon the case of a young woman sent to his hospital from the country, in order to have some malignant tumors removed from the genital organs, observed that on examination everything was found in a normal condition with the exception of the *carunculæ myrtiformes*, which, being somewhat enlarged, were mistaken by the practitioner for epithelioma. It is, he observed, by no means rare to have similar cases sent to him by practitioners who are not accustomed to the constant examination of the organs like himself—*Union Méd.*, June 20.

HYDATIDS PASSED BY INTESTINES.—By J. SINCLAIR HOLMES, M.D., Glenarm Co. Antrim.—Mrs. B., aged 60, enjoyed good health to nine months before decease, when she felt some pain over the liver and right shoulder. This gradually became most intense, and produced much debility, as all remedies, outward or inward, failed to give permanent relief. The liver became slightly enlarged, and resilience was lost.

A month before her death, my attention was called to a fæcal discharge, which gave her some temporary relief. It contained portions of a cyst, some as large as the segments of an orange, and having attached to their inner surface a number of pedunculated sacs, of the size of a pea. The microscope showed with these hooklets, evidencing their hydatid origin. No more came away, and I failed to obtain a *post-mortem* account to confirm my view that the hydatid fragments had come from a pill-box cyst which had opened direct from the liver into the intestine. The portions were too large to traverse the hepatic duct; nor was there at any time signs of jaundice.—*British Med. Jour.*

AN ANECDOTE OF ABERNETHY.—When the Rev. Joseph Tuckerman, D.D., of Boston, Mass., consulted Abernethy, on his first visit to England for his health, forgetful of the doctor's well-known antipathy to circumlocution, he expatiated upon the importance of health to him as the pastor of a "little parish in Chelsea," about which he indulged in some very natural but rather untimely regrets, until the impatient physician cut him short with "no matter about your little parish—go home and build a barn." Though inclined at first to resent this unsympathetic dictum, the reverend gentleman followed the advice, and found it precisely adapted to his case; he secured thereby exercise, and had a mechanical employment that occupied his attention at the same time; and when the barn was finished his health was restored.—*Medical Record.*

A NEW PRIZE.—Prof. Louis Elsberg offers two prizes:—one for an illustrated report of the clinic of diseases of the throat at the University Medical College; the other for an anatomical preparation of the pharyngo-nasal space. These prizes are open for competition to all medical students.—*Ibid.*

NEW MEDICAL COLLEGE.—A faculty of a new Medical College has been organized at Indianapolis, Indiana. An effort will be made to raise $100,000 for an endowment.—*Ibid.*

MEDICAL DIARY OF THE WEEK.

MONDAY, 9, A.M., Massachusetts General Hospital, Med. Clinic. 9, A.M., City Hospital, Ophthalmic Clinic.
TUESDAY, 9, A.M., City Hospital, Medical Clinic, 10, A.M., Surgical Lecture. 9 to 11, A.M., Boston Dispensary. 9–11, A.M., Massachusetts Eye and Ear Infirmary.
WEDNESDAY, 10, A.M., Massachusetts General Hospital, Surgical Visit. 11 A.M., OPERATIONS.
THURSDAY, 9 A.M., Massachusetts General Hospital, Medical Clinic. 10, A.M., Surgical Lecture.
FRIDAY, 9, A.M., City Hospital, Ophthalmic Clinic; 10, A.M., Surgical Visit; 11, A.M., OPERATIONS. 9 to 11, A.M., Boston Dispensary.
SATURDAY, 10, A.M., Massachusetts General Hospital Surgical Visit; 11, A.M., OPERATIONS.

BOOKS, &C. RECEIVED.—Report of the Metropolitan Board of Health, New York, 1868.—Annual Address delivered by W. O. Baldwin, M.D., before the American Medical Association, at New Orleans, La., May 4, 1869.—Hygiene in its Relations to Therapeutics. By Alfred L. Carroll, M.D. A paper read before the New York Medical Journal Association, June 25, 1869.—Transactions of the Medical Association of the State of Alabama, Annual Session, 1869.

DIED,—In Cambridge, John C. Hayden, M.D., aged 73.—At East Somerville, 7th inst., J. Henderson, M.D., 60 years 8 months.—At Dedham, 12th inst., Dr. Jeremy Stimson, 86.—At Walpole, 13th inst., Dr. Eben Stone, 71 years 10 months.

DEATHS IN BOSTON for the week ending August 14, 124. Males, 61—Females, 63.—Accident, 4—disease of the bowels, 1—congestion of the brain, 3—disease of the brain, 2—inflammation of the brain, 1—bronchitis, 1—cancer, 1—cholera infantum, 33—cholera morbus, 3—consumption, 14—convulsions, 1—croup, 1—diarrhœa, 5—dropsy, 2—dropsy of the brain, 1—dysentery, 6—typhoid fever, 2—gastritis, 1—disease of the heart, 2—infantile disease, 3—insanity, 1—intemperance, 1—disease of the kidneys, 3—disease of the liver, 1—congestion of the lungs, 1—inflammation of the lungs, 3—marasmus, 2—mortification, 1—old age, 4—paralysis, 1—peritonitis, 2—pleurisy, 1—premature birth, 1—disease of the spine, 1—stone in the bladder, 1—syphilis, 1—tumor, 1—ulcer of leg, 1—unknown, 7—whooping cough, 3.

Under 5 years of age, 68—between 5 and 20 years, 7—between 20 and 40 years, 20—between 40 and 60 years, 13—above 60 years, 16. Born in the United States, 88—Ireland, 44—other places, 12.